[redacted]

Major Miller/jm

[redacted]

Ltr 4109

CLASSIFICATION CHANGED TO [redacted]
Authority AFR 205-2
Major [redacted] APR 1956

[redacted]

[redacted] 10-7-73-S

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DOWNGRADED AT 3-YEAR INTERVALS:
DECLASSIFIED AFTER 12 YEARS
DOD DIR 5200.10

Cy 1 of 8 cys

10 JUL 1630

OFFICE SYMBOL	[redacted]				
NAME (SIGNATURE)					
DATE					

AFBMD Form 11
1 Nov 59

COORDINATION SHEET

Replaces AFBMD Form 11, 1 Jun 59

AIR FORCE - DPS, Ogden, Utah

VWZD Official File Cy

[redacted]

[illegible] AND DALLY

[illegible] 1964, THIS TO FOR COL WENDALL. SUBJECT [illegible] XXVI PRELIMINARY LAUNCH SUMMARY/FLIGHT [illegible]. FOLLOWING IS THE [illegible] SUMMARY REPORT [illegible] OF DISCOVERER XXVI/THOR [illegible]/AGENA B 1103/.

1. [illegible] OPERATIONS.

[illegible] OPERATIONS WERE STARTED AT [illegible] EDT ON 7 [illegible]. DURING TASK 11, THE [illegible] COUPLING IN THE [illegible] PURGE LINE BECAME DISENGAGED, AND A [illegible] SEAL IN THE THOR PAD LIQUID OXYGEN SUPPLY [illegible] FAILED. THESE PROBLEMS WERE CORRECTED BY REINSTALL- ING THE [illegible] COUPLING AND REPLACING THE [illegible] SEAL. THE FIRST AND ONLY COUNTDOWN HOLD WAS INVOKED AT T-40 MINUTES TO ALLOW COMPLETION OF WORK WHICH HAD BEEN DELAYED BY THE TASK 11 PROBLEMS. DURATION OF THE HOLD WAS 35 MINUTES. TERMINAL COUNT STARTED AT [illegible] PDT AND PROGRESSED NORMALLY TO LIFT OFF AT [illegible] PDT. THIS WAS THE FIRST ATTEMPT TO LAUNCH DISCOVERER XXVI.

2. BOOST PHASE.

A DATA LOSS HAS BEEN NOTED IN THE THOR TELEMETERED CONTINUOUS CHANNELS BETWEEN T + 0.3 SECONDS AND T + 0.7 SECONDS. NORMAL DATA DURING THIS BRIEF PERIOD APPEARS TO

[illegible] [redacted]

[redacted]

[redacted]

[illegible] TELEMETRY ARE ONLY
HAVE BEEN REPLACED BY A PARTIAL STEP CALIBRATION. ANOMALOUS RECORDS OF AGENA ELECTRICAL POWER DATA CHANNELS ALSO SHOW ABNORMAL SPIKING AT THE TIME OF UMBILICAL RELEASE. INVESTIGATION OF THESE ANOMALIES IS CONTINUING.

THE THOR ROLL PROGRAM AND CLEAN-OUT APPEAR TO HAVE BEEN SATISFACTORY. GROUND GUIDANCE STEERING COMMANDS WERE TRANSMITTED BETWEEN T + 90.1 SECONDS AND T + 146.8 SECONDS, AND VEHICLE RESPONSE TO THE COMMANDS APPEARS TO HAVE BEEN NORMAL. BOOSTER MAIN ENGINE CUTOFF OCCURRED AT T + 146.8 SECONDS IN RESPONSE TO A GROUND GUIDANCE COMMAND. VERNIER ENGINE CUTOFF FOLLOWED 9.2 SECONDS OF VERNIER SOLO OPERATION. PRELIMINARY CALCULATIONS, BASED ON GUIDANCE SYSTEM TRACKING DATA, SHOW THAT THE NOMINAL COAST APOGEE WAS 4.2 N.M. HIGHER THAN THE NOMINAL VALUE AND THE APOGEE VELOCITY WAS 8 FPS HIGHER THAN THE NOMINAL VALUE.

10 CPS OSCILLATIONS ARE EVIDENT IN THE VEHICLE ACCELEROMETER DATA AS FOR PREVIOUS DISCOVERER FLIGHTS. MAXIMUM PEAK-TO-PEAK OSCILLATION AMPLITUDE WAS 1.7 G'S IN AGENA LONGITUDINAL ACCELEROMETER DATA.

3. COAST PHASE.

TWX [redacted]

[redacted]

[illegible] GAIN

[illegible]

[illegible] THE ORBITAL STAGE VEHICLE.

[illegible] SATISFACTORILY AT T + [illegible]

[illegible] ATTITUDE CONTROL DURING THE COAST PHASE WAS SATISFACTORY.

C. ORBITAL STAGE BOOST

[illegible] OCCURRED IN A NORMAL MANNER AT T + [illegible] AND THE ENGINE OPERATED NORMALLY FOR [illegible] SECONDS. THE ENGINE WAS SHUTDOWN AT T + [illegible] SECONDS BY INTEGRATOR COMMAND. THE [illegible] VELOCITY GAIN INDICATED BY INTEGRATOR DATA DURING THE ORBITAL STAGE BOOST PERIOD WAS [illegible] FT/S. PRELIMINARY CALCULATIONS BASED ON RADAR TRACKING DATA SHOW THAT THE ACTUAL VELOCITY GAIN WAS APPROXIMATELY [illegible] GREATER THAN SHOWN BY THE INTEGRATOR. THE INTEGRATOR DATA RECORDS

[redacted]

[illegible]

[redacted]

[redacted]

[illegible] AFTER [illegible]

[illegible] THE AGENA [illegible] [illegible] AND AFTER AGENA [illegible] [illegible] [illegible] DRIFT IN THE DIRECTION TO CAUSE AN [illegible] VELOCITY GAIN. THE RATE OF DRIFT [illegible] [illegible] A VELOCITY GAIN [illegible] [illegible] OF ABOUT 150 [illegible]. INVESTIGATION OF THIS [illegible] VELOCITY [illegible] IS CONTINUING.

THE AGENA ATTITUDE WAS SATISFACTORILY CONTROLLED DURING THE ORBITAL [illegible], AND CONTROL GAS EXPENDITURE WAS NORMAL. ALL [illegible]-CONTROLLED EVENTS THROUGH THE START OF VEHICLE [illegible] AFTER ORBIT INJECTION OCCURRED AT [illegible] TIMES AND IN THE DESIRED SEQUENCE.

THE [illegible] VEHICLE WAS INJECTED INTO ORBIT AT AN ALTITUDE OF [illegible] MILES WITH A VELOCITY OF APPROXIMATELY [illegible] FPS. THESE INJECTION CONDITIONS [illegible] A NOMINAL [illegible] ORBIT PERIOD AND [illegible].

B. DATA ACQUISITION

THE TAPE [illegible] SYSTEM RECEIVED AND RECORDED THE AGENA TELEMETRY SIGNAL FROM LIFT OFF TO [illegible] SECONDS. [illegible] DATA DROPOUTS OCCURRED PRIOR TO AGENA [illegible]. LOSS OF DATA WAS NEGLIGIBLE. [illegible] [redacted]

 [redacted]

[redacted]

[illegible] TO VANDENBERG AFB ONLY.

LEVEL, AND DATA RECORDS ARE CURRENTLY IN [illegible]. THE ACQUISITION BEACON SIGNAL WAS TRACKED FROM LIFTOFF TO T + 104 SECONDS. THE VANDENBERG RADAR ACTIVELY TRACKED THE AGENA BEACON FROM LIFTOFF TO T + 400 SECONDS.

6. PAD DAMAGE.

DAMAGE TO THE EQUIPMENT ON PAD 5 WAS LIGHT, AND NORMAL PAD REHABILITATION TIME IS EXPECTED.

[illegible]

[redacted]

[redacted]

[illegible]